

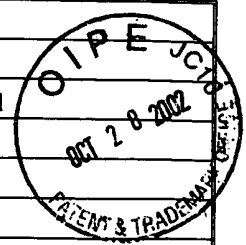
Substitute for Form 1449A/PTO (Modified)

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Complete if Known

Application Number	09/773,322
Filing Date	January 30, 2001
First Named Inventor:	Keith et al.
Group Art Unit	2621
Examiner Name	Tran, P.
Attorney Docket Number	74451.P041X2D2



Sheet 1 of 5

U.S. PATENT DOCUMENTS

Exam. Initial*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number Code ²	Kind (If known)			
	A	4985927		Norwood et al.	01/15/1991	
	B	4987480		Lipmann et al.	01/22/1991	
	C	5000183		Bonnefous	03/19/1991	
	D	5001764		Wood et al.	03/19/1991	
	E	5014134		Lawton et al.	05/07/1991	
	F	5018210		Merryman et al.	05/21/1991	
	G	5068911		Resnikoff et al.	11/26/1991	
	H	5073964		Resnikoff	12/17/1991	
	I	5095447		Manns et al.	03/10/1992	
	J	5101446		Resnikoff et al.	03/31/1992	
	K	5103306		Weiman et al.	04/07/1992	
	L	5121191		Cassereau et al.	06/09/1992	
	M	5124930		Nicolas et al.	06/23/1992	
	N	5128757		Citta et al.	07/07/1992	
	O	5148498		Resnikoff et al.	09/15/1992	
	P	5152953		Ackerman	10/06/1992	
	Q	5156943		Whitney	10/20/1992	
	R	5173880		Duren et al.	12/22/1992	
	S	5420891		Akansu	05/30/1995	
	T	3580655		Leith et al.	05/25/1971	

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		Office ³	Number ⁴	Kind Code ⁵ (If known)				
	U	WO	9423385			10/13/1994		
	V	EP	0622741			03/30/1994		
	W	UK	2284121			05/24/1995		
	X	WO	9609718			03/28/1996		
	Y	WO	9519683			07/20/1995		
	Z	EP	0701375			03/13/1996		
	AA	UK	2211691			07/05/1989		

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	BB	3950103		Schmidt-Weinmar	04/13/1976	
	CC	4136954		Jamieson	01/30/1979	
	DD	4223354		Noble et al.	09/16/1980	
	EE	4599567		Goupillaud et al.	07/08/1986	
	FF	4663660		Fedele et al.	05/05/1987	
	GG	4701006		Perlmutter	10/20/1987	
	HH	4760563		Beylkin	07/26/1988	
	II	4785349		Keith et al.	11/15/1988	
	JJ	4805129		David	02/14/1989	
	KK	4817182		Adelson et al.	03/28/1989	
	LL	4821223		David	04/11/1989	
	MM	4827336		Acampora et al.	05/02/1989	
	NN	4829378		LeGall	05/09/1989	
	OO	4837517		Barber	06/06/1989	
	PP	4864398		Avis et al.	09/05/1989	
	QQ	4897717		Hamilton et al.	01/30/1990	
	RR	4904073		Lawton et al.	02/27/1990	
	SS	4929223		Walsh	05/29/1990	
	TT	4936665		Whitney	06/26/1990	
	UU	4974187		Lawton	11/27/1990	
	VV	4982283		Acampora	1/1/1991	

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	WW	EP	0593013			04/20/1994		
	XX	EP	0510933			10/28/1992		
	YY	WO	8810049			12/15/1988		

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		Number Code ²	Kind (If known)			
	ZZ	4393456		Marshall, Jr.	07/12/1983	
	AAA	4569075		Nussbaumer	02/14/1986	
	BBB	4652881		Lewis	03/24/1987	
	CCC	4674125		Carlson et al.	06/16/1987	
	DDD	4785348		Fonsalas et al.	11/15/1988	
	EEE	4799179		Masson et al.	01/17/1989	
	FFF	4815023		Arbeiter	03/21/1989	
	GGG	4839889		Gockler	06/13/1989	
	HHH	4868868		Yazu et al.	09/19/1989	
	III	4918524		Ansari et al.	04/17/1990	
	JJJ	5049992		Citta et al.	09/17/1991	
	KKK	5072308		Lin et al.	12/10/1991	
	LLL	5097331		Chen et al.	03/17/1992	
	MMM	5101280		Moronaga et al.	03/31/1992	
	NNN	5128791		LeGall et al.	07/07/1992	
	OOO	5182645		Breeuwer et al.	01/26/1993	
	PPP	5315670		Shapiro	05/24/1994	
	QQQ	5321776		Shapiro	06/14/1994	
	RRR	5412741		Shapiro	05/02/1995	
	SSS	4155097		Lux	05/15/1979	

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Examiner Name	Tran, P.
Attorney Docket Number	74451.P04 X2D

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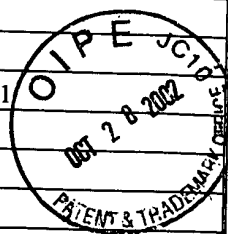
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OTHER ART - NO PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
	WWW	1977 IEEE International Conference on Acoustics Speech & Signal Processing, "Application of Quadrature Mirror Filters to Split Band Voice Coding Schemes", D. Esteban and C. Galand, pp. 191-195.	
	XXX	Martin Vetterli, "Filter Banks Allowing Perfect Reconstruction", <u>Signal Processing</u> 10, (1986), pp. 219-244.	
	YYY	R.E. Crochiere, S.A. Webber, J.L. Flanagan, "Digital Coding of Speech in Sub-bands", 1976, American Telephone and Telegraph Company, The Bell System Technical Journal, Vol. 55, No. 8, October 1976, pp. 1069-1085.	
	ZZZ	John W. Woods and Sean D. O'Neil, "Sub-band Coding of Images", <u>Proceedings ICASSP 86</u> , Tokyo, Japan, April 1986, pp. 1005-1008.	
	AAAA	"Proceedings: ICASSP 87", 1987 International Conference on Acoustics, Speech, and Signal Processing, April 6, 7, 8, 9, 1987, Volume 3 of 4, "Sub-band coding of Images Using Predictive Vector Quantization", P.H. Westernick, J. Biemond and D.E. Boekee, pp. 1378 - 1381.	
	BBBB	Mark J.T. Smith and Thomas P. Barnwell, III, "Exact Reconstruction Techniques for Tree-Structured Subband Coders", <u>IEEE Transactions on Acoustics, Speech, and Signal Processing</u> , Vol. ASSP-34, No. 3, June 1986, p. 434-441.	
	CCCC	Marvin Vetterli, "Multi-Dimensional Sub-band coding: Some Theory and Algorithms", <u>Signal Processing</u> 6 (1984), pp. 97-112.	
	DDDD	H. Gharavi and Ali Tabatabai, "Sub-band coding of Digital Images Using Two-Dimensional Quadrature Mirror Filtering", <u>SPIE Vol. 707 Visual Communications and Image Processing</u> , pp. 51-61.	
	EEEE	"Proceedings: ICASSP 87", 1987 International Conference on Acoustics, Speech, and Signal Processing, April 6,7,8,9, 1987, Volume 4 of 4, "Application of Quadrature Mirror Filtering to the Coding of Monochrome and Color Images", H. Gharavi and A. Tabatabai, pp. 2384-2387.	
	FFFF	International Search report for Application No. GB 9518298.6, dated November 1995.	

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